General

Guideline Title

Adapting your practice: treatment and recommendations for unstably housed patients with HIV/AIDS.

Bibliographic Source(s)

Audain G, Bookhardt-Murray LJ, Fogg CJ, Gregerson P, Haley CA, Luther P, Treherne L. Knopf-Amelung S, editor(s). Adapting your practice: treatment and recommendations for unstably housed patients with HIV/AIDS. 3rd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2013. 51 p. [79 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Menchaca M, Martinez L, Stewart J, Treherne L, Vicic W, Audain G. Post P, editor(s). Adapting your practice. Treatment and recommendations for homeless patients with HIV/AIDS. 2nd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2008. 62 p.

Regulatory Alert

FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- October 25, 2016 – Testosterone and Other Anabolic Androgenic Steroids (AAS) : The U.S. Food and Drug Administration (FDA) approved class-wide labeling changes for all prescription testosterone products, adding a new Warning and updating the Abuse and Dependence section to include new safety information from published literature and case reports regarding the risks associated with abuse and dependence of testosterone and other AAS.
- August 31, 2016 – Opioid pain and cough medicines combined with benzodiazepines : A U.S. Food and Drug Administration (FDA) review has found that the growing combined used of opioid medicines with benzodiazepines or other drugs that depress the central nervous system (CNS) has resulted in serious side effects, including slowed or difficult breathing and deaths. FDA is adding Boxed Warnings to the drug labeling of prescription opioid pain and prescription opioid cough medicines and benzodiazepines.
- March 22, 2016 – Opioid pain medicines : The U.S. Food and Drug Administration (FDA) is warning about several safety issues with the entire class of opioid pain medicines. These safety risks are potentially harmful interactions with numerous other medications, problems with the adrenal glands, and decreased sex hormone levels. They are requiring changes to the labels of all opioid drugs to warn about these risks.

Recommendations

Major Recommendations

Model of Care

Service Delivery Design

- Flexible service system – Allow walk-in appointments; provide outreach services; identify and resolve system barriers that impede access to care along the entire cascade from testing, linkage to care, retention and long-term adherence, to care and treatment.
- Integrated, interdisciplinary model of care – Coordinate medical and psychosocial services across multiple disciplines and delivery systems, including provision of healthful food, clothing, hygiene items, housing, and transportation to service sites. Arrange patients' appointments with other medical or service providers rather than making passive referrals. Facilitate patients' ability to self-manage their own human immunodeficiency virus (HIV) disease.
- Access to mainstream health care system – Network with community service providers and medical sub-specialists to facilitate specialty referrals; assist with transportation; accompany patients to appointments; consider the use of treatment advocates, peer navigators, and others who can facilitate access and retention in HIV care and services.

Engagement

- Outreach – Use outreach workers, lay educators, and peer advocates to help locate hard-to-reach individuals and encourage them to obtain medical care. Offer diagnostic testing and treatment at outreach sites.
- Clinical team – Include professionals and paraprofessionals with strong engagement skills; listen to patients in nonjudgmental way and try to understand their personal issues and challenges that may impact their HIV management and adherence to care; address psychosocial barriers to health as well as medical issues; employ patient-centered, intensive case management model with the patient as an active participant in decision-making.
- Therapeutic relationship – Build mutual trust with patient. Recognize that engagement of unstably housed patients often takes a long time. Promote provider retention and continuity of patient care. Proactively consider safety issues unique to outreach setting and provide crisis de-escalation training. Use regular team meetings and continuing education to promote professionalism and provide support for team members.

Diagnosis and Evaluation

Documentation

- Thorough documentation – Careful documentation is necessary in order to optimize coordination of care and patient safety. Releases of information according to state regulations should be followed. Discussions with other providers of care obtained verbally or via written documents should be incorporated into patient's medical record.

History

- Review of systems – Identify symptoms requiring immediate intervention, related to either HIV disease progression, new opportunistic infections (OIs) or co-morbid conditions, or potential side effects of therapy; assess for chronic symptomatology (weight loss, increasing fatigue, fevers/night sweats, cognitive dysfunction, etc.).
- Current living situation – Ask where the patient sleeps and spends time during day; document patient contact information and specify how to contact clinical team. Ask about access to food, shelter, restrooms, place to store medications, and options for stable housing.
- History of homelessness – Ask if this is the patient's first time without a home; determine whether lack of stable living situation is transitional, episodic, or chronic. Explore circumstances that precipitated homelessness, psychosocial issues contributing to housing issues, and available housing options acceptable to the patient.
- Social history – Ask about family, extended family, and/or current social supports who might make decisions in the event of serious illness requiring hospitalization.
- Regular activities – Ask if the patient has a schedule or daily routine; assess how a medical regimen can be integrated into regular activities. Explore ways to improve quality of life, motivation, and capacity for self-care.
- Medical history – Ask about prior hospitalizations and treatment. Ask when first diagnosed with HIV, and when and how infected. Inquire about initial, lowest, most recent CD4 counts, last viral load, history of OIs. Ask if ever treated for HIV; if so, which medications were taken and for how long. Inquire about previous side effects, any medication changes/discontinuations, and past adherence to treatment.
- Previous providers – If the patient is new to your clinic and received previous treatment, ask why the patient is changing services/providers

and what his/her expectations are. Contact prior provider(s) to discuss transfer of care and specific issues after obtaining signed release of information.

- Behavioral health history – Ask if ever treated or hospitalized for a mental health or substance use problem, whether currently taking any medications. Evaluate mood, cognitive function, and general outlook. Ask about major stressors and coping mechanisms. Seek insight into the patient's emotional status and priorities.
- History of abuse/current risk – Ask if ever physically hurt, afraid of being hurt, or forced to engage in sexual acts. Routinely assess for violence, abusive relationships, and patient safety.
- Alcohol/drug use – Ask about current and previous use of alcohol and drugs, including nicotine and inhalants. Inquire about drug(s) of choice, frequency and pattern of use, injection-drug use (IDU), injection practices, and access to clean needles. Ask how periods of sobriety were achieved if relevant. Explore triggers and motivation to change substance use behavior.
- Sexual history/current practices – Ask about specific sexual practices that may increase risk for HIV infection; if they exchange sex for drugs, food or money; and whether the patient has had sex with men and/or women. Ask about condom use and history of any sexually transmitted diseases.
- Reproductive history – Ask female patients about past/current pregnancies, complications, whether any children were HIV-infected, and if so, how treated.
- Work history – Ask what types of work the patient has done and longest time held a job. Ask about work-related illness, injuries, and toxic exposure (asbestos, silica, coal). Inquire about military service.
- History of detention/incarceration – Ask if ever detained by police or incarcerated; and if so, ask about medical treatment during incarceration. Work with health care providers at local correctional facilities to promote continuity of care. Address risk of drug overdose after release with patients with history of detention/incarceration who are using drugs (especially heroin) and facilitate post-incarceration linkage to care.
- Literacy – Evaluate ability to read instructions in English or primary language in a non-threatening way.
- Nutrition/hydration – Look for signs/symptoms of malnutrition, dehydration. Ask about diet and eating habits; evaluate knowledge of proper diet, food resources, cooking skills, availability of cooking facilities. If the patient is not eating well, determine why. Inquire about access to water and other liquids.
- Community – Elicit information about cultural/religious heritage and affiliations. Ask about attitudes of family, friends, community, cultural group toward HIV risk behaviors and persons who contract the virus.

Physical Examination

- Comprehensive vs. serial, focused examinations – Do focused physical exams in outreach settings; reserve comprehensive exams for clinic; defer genital exam until the patient feels comfortable unless there are clinical signs or history to indicate genito-urinary infections or other issues that should be immediately evaluated.
  Women – Offer option of being examined by provider of same sex. Assess for cervical dysplasia, human papillomavirus (HPV), vaginal candidiasis, pregnancy, evidence of physical/sexual abuse.

  Sexual minorities – Provide appropriate exam/screening for biological male taking estrogen, female taking testosterone, patient who has had sexual reassignment surgery or silicon or other implant. Be mindful of desires of the patient (e.g., masculine female to male transgender patient may decline Pap smear or mammogram), but discuss the benefits and risks of recommended treatments. Listen nonjudgmentally to concerns; provide compassionate care.

- Touch therapy – Express empathy with appropriate physical contact (hand shake, shoulder touch); but recognize that some patients may find physical contact threatening (pay attention to nonverbal signals or potential cultural issues).
- Signs and symptoms of HIV complications – Realize higher risks associated with homelessness for tuberculosis (TB), bartonellosis, weight loss and poor nutrition, dehydration, substance abuse, mental health issues, and change in mental status due to comorbidities. Examine for oral candidiasis and oral leukoplakia (especially new patients with limited access to health care/no history of HIV test).
- Dermatological exam – Look for skin growths, rashes, and fungal infections in mouth, groin, feet. Pay special attention to genital and rectal warts, ecto-parasites such as scabies and lice, skin problems associated with IDU, and foot care. Be aware of medications that precipitate sensitivity to sun exposure.
- Neurological/psychiatric evaluation – Assess for mental health conditions, including post-traumatic stress disorder (PTSD), substance abuse, and cognitive impairment; explore possibility of underlying psychiatric condition(s) in patients with substance dependence.
- Dental/retinal exams – Include dentist and optometrist/ophthalmologist on clinical team; build collaborations and referral systems with these providers; use portable equipment in outreach sites.

Diagnostic Tests

- HIV testing/screening – Use rapid testing in outreach settings, including shelters and correctional facilities, and for unstably housed/runaway youth. Provide direct linkage to health care providers and assertive case management to assure access to HIV care and long-term retention. Offer testing to partners and children of HIV+ persons, if not already tested (provide incentives).
- Pre-test counseling – Educate the patient about universal HIV testing but give patient the option to decline HIV test; invite questions, offer information about what the test means.
- Confirmatory test – If initial screening test (oral mucosal, rapid test, or standard blood test) is positive, do confirmatory test (Western blot/immunofluorescence assay).
- Post-test counseling – Be sure the patient is engaged in care when a positive test result is communicated. Be personally available, listen, maintain contact. Use peer counselors (HIV-infected unstably housed/formerly homeless individuals who have done well) to provide social support
- Laboratory tests – Baseline labs: complete blood count (CBC), electrolytes, glucose, blood urea nitrogen (BUN), creatinine, liver function tests, lipid studies, urinalysis, *Toxoplasmosis gondii* immunoglobulin G (IgG) antibody, rapid plasma reagin (RPR) or Venereal Disease Research Laboratory (VDRL), hepatitis A antibody total (Hep A, Total), hepatitis B surface antibody (HBsAb), hepatitis B surface antigen (HBsAg), and hepatitis C antibody (Hep C Ab). Pay more attention to liver function tests in unstably housed patients, whose risk for liver damage (secondary to hepatitis, alcoholic cirrhosis) is high. Regularly monitor liver function in patients on antiretroviral therapy (ART), hormones, hepatitis B virus/hepatitis C virus (HBV/HCV) treatment.
- HIV viral load – Perform HIV viral load test (e.g., HIV-1 ribonucleic acid [RNA] quantitative assay or branched chain deoxyribonucleic acid [DNA] assay [bDNA]) at baseline exam and every 3 to 4 months if the patient is stable on therapy. Also check HIV viral load when acute retroviral syndrome is suspected. Avoid HIV RNA assay following single positive rapid antibody test unless the patient reports prior positive HIV test.
- HIV-1 resistance testing – Baseline genotypic resistance testing is recommended for all patients prior to initiation of ART and for treatment failure with HIV-1 RNA levels >500-1000 copies/ml while taking failing regimen. Resistance testing is important even for treatment-naïve patients, 6-16% of whom have at least one major resistance mutation in their wild-type virus prior to starting ART.
- Human leukocyte antigen (HLA)*B-5701 testing – Test all patients for HLA*B-57 prior to initiating regimen containing abacavir (if assay available). Abacavir is contraindicated for any patient testing positive for HLA*B-57 (50% chance of severe hypersensitivity reaction).
- Tuberculin test – Test HIV+ patient for latent TB using tuberculin skin test (TST)/purified protein derivative (PPD) or blood assay test (QuantiFERON-TB Gold test [QFT-g]). Re-check unstably housed patients with negative result every 6 months; for those testing positive, do baseline chest X-ray followed by symptom screen every 6 months regardless of CD4 count. Evaluate for active TB disease if any symptoms develop even if skin or blood test is negative. Collaborate with local health department for TB surveillance, screening and referrals to help decrease barriers to care. Provide written record of TB test results on wallet-sized card. Treat patient appropriately, either for latent TB infection or active TB; use directly observed treatment for active TB in partnership with the health department.
- Hepatitis testing – Test every HIV+ patient for HCV and screen annually. Test for immune response (anti-HBs) after HBV vaccination; consider double dose of vaccine if no immune titers; consider HBV DNA testing of patients with unexplained increased liver enzymes. Test for immunity (see Baseline labs) and vaccinate for hepatitis A accordingly.
- Cancer/sexually transmitted infection (STI) screening – Pap smear (for cancer, HPV) for all HIV+ women every 6 months until 2 normal Paps, then once per year. Gonorrhea (GC)/chlamydia and RPR or VDRL testing at baseline, then annually or more if clinically indicated. Consider anal Pap smear and tests for rectal *Neisseria gonorrhoeae* and *Chlamydia trachomatis* infection at baseline and annually in men who have sex with men (MSM) and any patient with history of anogenital condylomata.
- Pregnancy test – Offer urine chorionic gonadotropin (UCG) test to sexually active female patients of childbearing age. Reinforce the importance of barrier method for birth control to prevent STI and transmission of HIV to others even if other contraceptive measures are used.

Plan and Management

Plan of Care

- Next steps – Develop plan of care with the patient's active involvement. Specify next steps to expect, balancing patient readiness for treatment with need to address key issues in timely manner.
- Interdisciplinary team – Include addiction/mental health counselors, medical care manager, medical case manager/primary social worker, peer (as appropriate to individual client), and treatment advocate on the clinical team. Every member of the team should engage in care planning/coordination and patient education and maintain a client-centered approach.
- Basic needs – Develop strategies with the patient to meet basic needs (food, clothing, housing, mental health issues) as part of individualized plan of care.
- Patient priorities and goals – Assess the patient's priorities in meeting immediate and long-term needs. Address immediate medical needs first (patient's reason for the visit) rather than underlying causes.

- Governmental assistance – Assist with applications for programs that facilitate access to health and social services (Ryan White, Housing Opportunities for Persons with AIDS [HOPWA], Supplemental Security Income/Social Security Disability Insurance [SSI/SSDI], Medicaid, Supplemental Nutrition Assistance Program [SNAP], Health Care Exchanges). Be mindful that Ryan White operates as a payer of last resort program. Once the individual secures Medical Assistance or other coverage, they are no longer eligible for many Ryan White services. Consequently, engage unstably housed HIV-positive individuals into comprehensive programs that have diversified funding sources so the individual is eligible for services regardless of insurance status.
- Communication – Do not criticize the patient; speak in a straightforward, nonjudgmental manner. Listen to the patient's concerns and priorities. Elicit feedback regarding the patient's understanding of the plan of care. Use an interpreter, peer (as appropriate to individual client), or lay educator to facilitate communication and assure culturally competent care for patients with limited English proficiency.

Education, Self-Management

- Basic education about HIV – Teach HIV-infected patients how to know if they are sick, how to tell if illness is serious, how to care for self when sick, when to seek urgent/emergent care. Specify where to get medicine and where to go to recuperate when ill.
- Self-management of HIV disease – Providers should facilitate a self-management model in which patients assume an active and informed role in health care decision-making to change behaviors and social relations to optimize their health and proactively address predictable challenges of HIV. Encourage patient's self-efficacy and ability to recognize and address his/her own barriers to retention in care and adherence to treatment.
- HIV transmission – Review safer sexual practices; facilitate access to condoms. Teach intravenous (IV) drug users risk reduction strategies: self-administered injections, avoid sharing drug paraphernalia, use of needle exchange program. Stress antiretroviral prophylaxis to reduce perinatal transmission of infection as well the benefit for HIV treatment and viral suppression to prevent transmission to partners. Help HIV-infected mothers who are unstably housed determine most appropriate infant feeding option, depending on individual circumstances (exclusively formula feed or breastfeed; don't alternate between the two).
- Prevention – Discuss ways to reduce HIV risks for the patient and others, emphasizing HIV treatment and viral suppression. Promote behavioral change through individual, small group, and community interventions based on investigation of actual patient behaviors and structural barriers to desired change. Use motivational interviewing, risk reduction techniques, and social skills training. Reinforce information with interactive activities involving repetition, positive feedback, and acting out new skills.
- Addiction management – Realize that a history of drug abuse does not preclude successful treatment for HIV. Tailor HIV care to needs of the patient; look for evidence of a stable routine to evaluate readiness for ART. Use outreach and intensive case management to facilitate engagement in care. For patients able to integrate medical regimen into daily routine, use peer educators and counselors to facilitate adherence. For those not ready for ART, promote harm reduction, treat comorbidities, and prescribe OI prophylaxis. Educate the patient about potential interactions between drugs of abuse and antiretroviral medications.
- HIV therapy – Assure HIV-infected unstably housed patients that they can manage treatment successfully. Explore their understanding of HIV therapy and address any concerns or misconceptions. Explain what CD4 counts and viral loads are and how these measurements are used. Teach patient to track their own CD4 counts and HIV viral loads to monitor their own response to treatment.
- Written instructions/reminders – Specify when to take medications each day; confirm understanding of medical regimen. If trouble reading, refer to member of clinical team who can spend more time explaining instructions; offer referral to literacy/English as a Second Language (ESL) program. Specify any dietary restrictions associated with medications. Ask shelter staff or peer advocates to remind the patient to take medications.
- Drug resistance – Explain risk of developing resistance to HIV medications if not taken consistently or appropriately, but stress importance of ART for individual and community benefit.
- Treatment advocates – Use social workers, nurses, peers (as appropriate to individual client), or case managers as liaisons between the patient and providers to promote successful treatment adherence.
- Directly observed therapy (DOT) – Use DOT for patients with co-occurring TB, substance use disorders, and/or mental illness; provide transportation assistance to bring them to the clinic once daily to take medications.
- Side effects management– Be candid about possible side effects of ART (e.g., diarrhea) and provide recommendations for over the counter or prescription medications to minimize them. Ask what side effects the patient has noticed; if no medical alternative with fewer/less severe side effects is available, explore strategies to minimize/accommodate them. Provide snacks.
- Urgent medical problems – Explain symptoms of hypersensitivity and other adverse effects to all prescribed medications. Stress need for prompt evaluation of: fever, new rash, difficulty breathing, abdominal/back pain, vomiting, headache, vision changes. Tell the patient to go to a drop-in clinic or emergency room (ER) if feeling ill. Suggest either continuation or discontinuation of medicine as appropriate.
- Supportive relationships – Encourage supportive relationship with a provider, social worker, peer navigator, or friend. Link the patient with a sponsor in a community-based program. Offer social support groups in addition to groups for therapy or counseling. Help patients adapt to living in transitional housing.
- Nutrition counseling – Educate the patient about nutrition, diet, dietary supplements. Include a nutritionist/dietician on the clinical team.

Prescribe multivitamins, nutritional supplements with less familiar brand names/lower resale value to reduce risk of theft.

- Medical home – Explain what primary care is, how to use a regular source of care, and how a relationship with provider(s) can help the patient avoid becoming acutely ill.
- Education of service providers – Educate all service providers about HIV and the need for nonjudgmental, compassionate care. Explain to medical providers how treatment adherence and successful outcomes are possible even for unstably housed individuals with behavioral health problems. Educate primary care providers about management of chronic pain and addictions. Understand your own feelings about substance use, sex work, mental illness, homelessness; seek insight from more experienced providers.

Medications

- Medical priorities – Weigh benefits and risks of ART. Take into consideration other medical priorities, including: psychotropic therapy, management of substance abuse and uncontrolled chronic diseases such as hypertension, diabetes, seizures (which can affect HIV treatment). However, recent guidelines recommend considering ART for all adults with HIV infection, with the strength of evidence increasing as CD4 counts decrease.
- OI prophylaxis – Explain importance of prophylaxis for OIs at every visit. If the patient is not initially interested in preventive treatment, provide education and re-assess willingness to take it at subsequent visits. Recognize that taking medications for OI prophylaxis regularly can be an indication of readiness for ART.
- Immunizations – Unstably housed patients should receive: influenza vaccine (annually), hepatitis A & B vaccine, tetanus, diphtheria, acellular pertussis (Tdap) vaccine (if no prior vaccination and 11-64 years of age; 1 booster dose if last immunization >10 years ago), and pneumococcal polysaccharide vaccine (PPV) every 5 years.
- HIV treatment readiness – Build therapeutic relationship and assure regular source of care before initiating ART. Encourage more frequent visits to prepare for treatment. Evaluate readiness for treatment and ability to adhere to plan of care: understand lifestyle, how basic needs are met; look for evidence of a daily routine. Address issues that may complicate adherence (e.g., mental illness, substance use). Involve the patient in making decision to begin ART. Patients starting ART should be willing and able to commit to treatment and understand the benefits and risks of therapy and the importance of adherence. Patients may choose to postpone therapy, and providers, on a case by case basis, may elect to defer therapy on the basis of clinical and/or psychosocial factors.
- "Practice" medications – Consider use of placebos or vitamins as "practice medications" to demonstrate readiness/lack of readiness for ART (the patient must be aware that these tablets are not ART). Not recommended for patients with CD4 <200, OIs, or co-morbid illnesses for whom ART is urgent.
- Antiretroviral medications – Be knowledgeable about HIV treatment alternatives and choose a regimen that is most appropriate for the patient considering his/her other medical issues, medications, and preferences. Individualize initiation of ART and continually reassess treatment adherence and effectiveness. Ensure access to medications that can be taken once or twice daily.
- HIV specialist – Partner with an HIV specialist through consultation or referral; if >5 patients are HIV+, consider developing expertise in treatment of HIV/acquired immune deficiency syndrome (AIDS) yourself. Optimally, HIV specialist should be part of the clinical team.
- Simple regimen – Prescribe the simplest, most effective ART regimen possible; once daily dosing is optimal, if clinically indicated. If prescribing trimethoprim-sulfamethoxazole double-strength (TMP-SMX DS) for *Pneumocystis (carinii) jiroveci* pneumonia (PCP), one dose per day is preferable, but 3 times per week is acceptable. Don't undertreat HIV or OI just because the patient is without stable housing.
- Dietary restrictions – Inquire about access to regular meals. If possible, prescribe medications without dietary restrictions.
- Side effects – Be more aggressive with unstably housed patients in treating side effects or changing medication, if an equally effective alternative is available.
- Drug toxicities – Be aware of serious toxicities associated with ART and evaluate for potential drug-drug interactions. Screen for HLA-B5701 before prescribing abacavir. Review symptoms of hypersensitivity with the patient.
- Drug interactions/contraindications – Monitor all patients on ART for development of glucose intolerance, diabetes, lipid abnormalities, lipodystrophy.
  Methadone – Be aware that non-nucleoside reverse transcriptase inhibitors (NNRTI) and certain protease inhibitors can reduce methadone efficacy by as much as 50%. If protease inhibitor is indicated, use ritonavir boosting or work directly with methadone maintenance treatment program to adjust dosage upward. Recognize that successful adherence to methadone therapy for persons addicted to heroin can increase adherence to ART.

  Other analgesics – Be aware that some HIV medications can decrease/increase efficacy of pain medications, including narcotics. Work with the patient to understand underlying cause of pain; prescribe appropriate pain medication and document why you prescribed it. To avoid contributing to drug-seeking behavior, make a contract with the patient specifying the plan of care and designating a single provider for pain prescription refills.

- HIV treatment and substance use – Prescribe medications compatible with substances used. If ART is desired and there is evidence the

patient can adhere to the medical regimen despite substance use, suggest taking HIV medications before using other drugs.

- Drug resistance – Use genotype or phenotype testing to inform choice of therapy. Individualize therapy; balance possible side effects with simplicity and low resistance barrier with tolerability. Select initial treatment regimen to which the patient can adhere, preferring medications with a low pill burden where possible.
- Adherence monitoring – At every visit, ask how many doses of each medication were missed over the last week/month. Explore and address barriers to adherence. Problem solve with the patient; if forgetting doses is a problem, use pill boxes/watch alarms/other methods to help patient remember medications. Address adherence routinely so problems are identified before the patient develops resistance and fails regimen. (N.B.: CD4 decrease or viral load rebound is sign of treatment failure, very late stage marker of adherence.)
- Medication storage – Allow unstably housed patients to store medications at clinic as needed. If the patient does not have access to refrigeration, avoid prescribing medications that require it (e.g., ritonavir). Urge shelter staff to make stored medications easily available to residents.
- Access to medications – Assure continuous access to medications before initiating treatment. Provide transportation to pick up medications from clinic or pharmacy, or arrange for delivery to a reliable location acceptable to the patient.

Associated Problems, Complications

- Medication side effects – Recognize that medications which interfere with survival on the streets by making people feel sicker or more fatigued will not be acceptable to unstably housed patients. Be more aggressive in treating side effects or changing medication for unstably housed patients if an equally effective alternative is available.
- Severe drug toxicities – Be aware of life-threatening complications of ART and how to manage adverse effects (e.g., medication hypersensitivity reaction, hepatic necrosis, Stevens-Johnson syndrome, pancreatitis, lactic acidosis). Avoid drug-drug interactions.
- More acute illness – Unstably housed people with HIV/AIDS often present with more advanced disease, exacerbated by OIs and other comorbidities. Provide/refer to medical respite facility where unstably housed patients can convalesce following hospitalization or when ill, or receive end-of-life care.
- Co-occurring mental illness & substance dependence – Treat co-occurring disorders simultaneously within the same program if possible, or coordinate care closely with other providers. Involve a psychiatrist knowledgeable about cumulative side effects of polypharmacy who is interested in assessment and management of HIV-infected unstably housed patients with behavioral health disorders.
- Cognitive impairment – If the patient has difficulty remembering appointments, don't assume non-adherence; assess cognition. Explore etiology of cognitive problems (e.g., mental illness, chronic substance abuse, AIDS-related dementia, OIs); seek accurate diagnosis with specialty consult if necessary.
- Hepatitis – Treat HCV/HBV in patients with co-occurring HIV. Consult a specialist. Be aware of association between antiretroviral drugs and hepatotoxicity; carefully monitor liver enzymes during ART. Abrupt cessation of antiretroviral medications that also treat hepatitis B may cause serious hepatocellular damage resulting from reactivation of HBV; patients should be advised against self-discontinuation and carefully monitored during interruption in HBV treatment. Seek psychiatric consult prior to initiating HCV therapy. For co-occurring alcoholism, use behavioral contract or other strategies concurrently with HCV treatment to promote sobriety and reduce risk of liver damage. When initiating ART in patient with HIV/HBV co-infection, consider including lamivudine, tenofovir, and emtricitabine as part of a fully suppressive antiretroviral regimen. Immunize against HBV (especially IDUs) if not already infected. Immunize seronegative patients against hepatitis A virus (HAV). For better treatment outcomes, facilitate access to supportive housing and behavioral health care.
- Tuberculosis (TB) – Do more frequent TB screening of HIV-infected unstably housed persons. If tuberculin test or interferon-gamma release assay (IGRA) is positive, initiate isoniazid prophylaxis. Teach patient to report symptoms of TB disease and immediate evaluate for active TB disease if present. Use directly observed TB therapy to promote treatment adherence and reduce risk of drug resistant organisms if TB disease is present. Rifampin is not recommended in HIV infected patients receiving ART for treatment of latent TB or active TB, but rifabutin can be used with certain HIV drugs if appropriate dose adjustments are made.
- Abuse – Work with all service providers in clinics and shelters to protect unstably housed patients from physical assault and verbal abuse.
- Pregnancy – Educate and ensure access to contraception to prevent unwanted pregnancies: medroxyprogesterone acetate every 3 mo/patch/pill as well as male condoms or alternative barrier methods (female condom, diaphragm if desired). Develop good consulting relationships and care coordination with obstetricians to help pregnant unstably housed patients with HIV. Facilitate Medicaid enrollment of infants born to HIV-infected mothers to expedite zidovudine therapy postnatally. When selecting an ART combination for pregnant women, clinicians should consider the known safety, efficacy, and pharmaceutical data on use during pregnancy for each agent.
- Lack of transportation – Provide transportation assistance/carfare to facilitate appropriate follow-up care.
- Lack of stable housing – Strongly advocate for low-barrier subsidized housing in your community for people living on the streets or in shelters, with no pre-requisite to achieve sobriety or attain a level of stability before housing is offered.
- Financial barriers to HIV care – Facilitate applications for Supplemental Security Income (SSI)/Medicaid or SSDI/Medicare. Seek Ryan White services for patients with no/limited health insurance coverage. Keep detailed records of functional impairments; secure representative to help patients apply for SSI/SSDI; develop working relationship with Disability Determination Services; ensure that consultative

examinations are conducted by physicians with significant experience treating unstably housed patients. Advocate for all patients to obtain needed health care, regardless of insurance status.

- Stigmatization – Provide nonjudgmental, compassionate care and offer social support to unstably housed individuals, especially those with HIV/AIDS. Educate shelter staff about HIV/AIDS.
- Incarceration – Develop collaborative relationships with correctional facilities to assure appropriate discharge planning and continuity of care both during incarceration and following release.
- Special populations:
  Women – Offer social support and counseling to HIV-infected unstably housed women, many of whom have a history of abuse, can be harder to reach than men, and may require more intensive services.

  Youth – When discussing behavioral change with runaway/unstably housed youth, focus on immediate concerns rather than possible future consequences.

  Sexual minorities – Create a safe and nondiscriminatory clinical environment for HIV-infected gay/lesbian/bisexual/transgender (GLBT) patients; build trust and rapport; facilitate access to comprehensive health care and housing. Educate patients using injected hormones about clean needle exchange.

  Immigrants – Assure access to health care for unstably housed individuals HIV, regardless of immigration status. Provide linguistically appropriate and culturally competent health services. Alleviate patient concerns regarding being reported by HIV providers to immigration officials for deportation or other cultural concerns.

Follow-up

- Contact information – At every visit, seek updated contact information (telephone/cell phone numbers, mailing/email addresses) for the patient, a family member/friend with a stable address, shelter where the patient is currently staying, or other location where s/he might be found. Solicit nicknames used in various venues.
- More frequent follow-up – Try to see or touch base with unstably housed patients every 1 to 2 weeks, especially early in the course of treatment. Reinforce the patient's understanding of the plan of care repeatedly and ensure s/he has a voice in his/her care and treatment decisions. Be mindful that relationship-building is as important as primary care interventions. Ensure each member of the interdisciplinary team understands roles and relationships congruent to establishing long-term, consistent contact.
- Drop-in system – Encourage routine follow-up for established patients supplemented by an open-door policy for drop-ins (more effective than appointments for people whose lives are chaotic). Equip the system to provide all wrap-around care in "one stop shopping" model, not simply primary care.
- Help with appointments – Help patients make and keep clinical appointments and routinely remind them of appointments. Find out what their regular commitments are and at what time of day they can come to the clinic.
- Incentives – Provide a client advocate/peer/peer navigator to accompany the patient to appointments for services provided outside your clinic such as magnetic resonance imaging (MRI), colposcopy, or ambulatory surgery. Provide incentives for every kept appointment or group meeting attended (e.g., carfare plus meal voucher).
- Transportation – Provide transportation to and from specialty referrals. Arrange to pick up new patients and those unable to come to the primary care clinic on their own. Work within the interdisciplinary team to balance need and services with developing patient autonomy and independence.
- Outreach and intensive case management – Provide medical outreach to unstably housed HIV-infected individuals on the streets, in shelters, drop-in centers or transitional/long-term housing for unstably housed people living with AIDS. Visit inpatients daily to reinforce engagement, facilitate discharge planning, and promote better follow-up and coordination of care.
- Peer support – Offer group activities to create positive peer support for patients having difficulty with ART. Create opportunities for group leisure or quality of life activities to develop or deepen support networks and promote a sense of self-worth.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Disease/Condition(s)

Human immunodeficiency virus (HIV) infection
Acquired immune deficiency syndrome (AIDS)

Other Disease/Condition(s) Addressed

- Cognitive impairment
- Hepatitis
- Mental illness (both Axis I and Axis II disorders)
- Substance-related disorders
- Tuberculosis

Guideline Category

Counseling

Diagnosis

Evaluation

Management

Prevention

Treatment

Clinical Specialty

Cardiology

Dermatology

Family Practice

Hematology

Infectious Diseases

Internal Medicine

Nephrology

Neurology

Nutrition

Obstetrics and Gynecology

Pediatrics

Psychiatry

Psychology

Pulmonary Medicine

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Dietitians

Health Care Providers

Nurses

Pharmacists

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Public Health Departments

Social Workers

Substance Use Disorders Treatment Providers

Guideline Objective(s)

To assist clinicians who provide human immunodeficiency virus (HIV) care for unstably housed adults and adolescents by providing both evidence-based recommendations and practical suggestions for managing this population

Target Population

Unstably housed adults and adolescents with human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS), including the following special populations:

- Unstably housed women
- Unstably housed youth
- Unstably housed sexual minorities
- Unstably housed immigrants

Interventions and Practices Considered

Diagnosis/Evaluation

1. Patient history, including review of systems, current living situation, history of homelessness, social history, regular activities, medical history and previous providers, behavioral health history, history/current risk of abuse, alcohol/drug use, sexual history/current practices, reproductive history, work history, history of detention/incarceration, literacy, assessment of nutrition/hydration, and cultural and religious history
2. Physical examination, including comprehensive versus focused examination(s), examinations for women and sexual minorities, touch therapy, recognizing signs and symptoms of human immunodeficiency virus (HIV) complications; dermatological exam, neurological/psychiatric evaluation; dental/retinal exams
3. Diagnostic tests, including HIV testing/screening and confirmatory test if needed, pre- and post-testing counseling, baseline laboratory tests including liver function, virologic test for HIV viral load, HIV-1 resistance assay, human leukocyte antigen (HLA)*B-5701 testing, purified protein derivative (PPD) tuberculin skin testing or blood assay (QuantiFERON) every six months, chest x-ray, hepatitis testing, cancer/sexually transmitted disease testing, pregnancy test

Management/Treatment

1. Consideration of service delivery design, including flexible service system; integrated, interdisciplinary model of care; access to mainstream health care system

2. Plan of care, including establishing an interdisciplinary clinical team; assessing patient's needs, priorities, and goals; helping the patient in applying for governmental assistance; eliciting patient feedback to confirm understanding of the plan of care
3. Education/self-management, including basic education about HIV infection, self-management of HIV disease, HIV transmission, HIV prevention, addiction management, HIV therapy, drug resistance, nutrition, and medical home; providing written instruction/reminders; providing treatment advocates such as social workers or peers; use of directly observed therapy (DOT) when appropriate; side effects management; management of urgent medical problems; encouraging supportive relationships; education of service providers
4. Medications, including consideration of medical priorities (weighing risks/benefits of antiretroviral therapy [ART]), opportunistic infection prophylaxis, immunizations, ensuring HIV treatment readiness, use of "practice medications," individualized initiation of ART, partnering with an HIV specialist, use of simple regimens, prescribing medications without dietary restrictions, aggressive treatment of side effects, evaluating drug toxicities, monitoring for drug/interactions/contraindications, prescribing HIV medications compatible with substances used, use of genotype or phenotype testing to assess drug resistance, adherence monitoring, medication storage, ensuring medication access
5. Recognizing and managing associated problems and complications, such as medication side effects, severe drug toxicities, more severe illness, co-occurring mental illness and substance dependence, cognitive impairment, hepatitis, tuberculosis, abuse, pregnancy, lack of transportation and stable housing, barriers to health insurance and disability assistance, stigmatization, incarceration, needs of special populations (women, youth, sexual minorities, immigrants)
6. Facilitating return for follow-up by identifying multiple ways to contact the patient; creating a drop-in system, reminders and incentives for kept appointments; providing transportation, intensive case management and peer support

Major Outcomes Considered

- Human immunodeficiency virus (HIV) prevalence rate
- Acquired immunodeficiency syndrome (AIDS) prevalence rate
- AIDS case rate
- CD4 counts, viral loads in patients receiving active antiretroviral therapy (ART)
- Treatment adherence
- Health status
- Associated problems, complications
- Drug interactions/contraindications
- Drug toxicities
- Morbidity
- Mortality

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

A literature search was conducted on Medline/PubMed, Google Scholar, the National Health Care for the Homeless Council website, the World Health Organization (WHO) website, and the Agency for Healthcare Research and Quality (AHRQ) website using the terms "homeless" and "HIV/AIDS" to identify the most up-to-date research on human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) care for homeless and other vulnerable populations. References were also identified through online searches of current HIV guidelines and bibliographies of relevant reports.

The time frame for the literature searches was approximately August 1990 to May 2013. References cited and included in the guidelines were ultimately selected by the advisory committee. Selection (inclusion/exclusion criteria) was based on the judgment of these experienced homeless

services providers regarding the validity, significance, and usefulness of the publications to clinicians whose patients include individuals who are homeless or at risk of homelessness.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Not stated

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

The guideline developer's Advisory Committee identifies, in the original guideline document, the clinician who reviewed and commented on the draft recommendations prior to publication.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Simple adaptations of established clinical guidelines will maximize opportunities for unstably house individuals with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) to receive the optimum standard of care and decrease their morbidity, mortality, and risk of transmission to others.

Potential Harms

- Common side effects of antiretroviral therapy (ART) include diarrhea (sometimes explosive) (particularly from some protease inhibitors), nausea (if taken on an empty stomach), peripheral neuropathy (numbness/tingling in extremities, exacerbated by poor nutrition and constant walking), and nightmares. Living in a shelter or on the streets is especially difficult for patients with these symptoms, which are exacerbated by chronic sleep deprivation and depression.
- ART can cause life-threatening complications and adverse effects such as medication hypersensitivity reactions, hepatic necrosis, Stevens-Johnson syndrome, pancreatitis, lactic acidosis, and serious drug-drug interactions. Carefully monitor all patients on ART for the development of glucose intolerance and diabetes, as well as for lipid abnormalities and lipodystrophy.
- Alcohol can potentiate hepatic side effects of some medications.
- Human immunodeficiency virus (HIV) infection and treatment can also trigger and exacerbate underlying mental illness.
- Some medications increase sensitivity to sun exposure (e.g., trimethoprim-sulfamethoxazole double-strength [TMP–SMX DS], commonly prescribed for *Pneumocystis [carinii] jirovecii* [PCP] prophylaxis).

See the "Associated Problems, Complications" section of the original guideline document for more information.

Contraindications

Contraindications

- Abacavir is contraindicated for any patient testing positive for human leukocyte antigen (HLA)*B-57 (50% chance of severe hypersensitivity reaction).
- Drug interactions/contraindications - Chronic illness may complicate human immunodeficiency virus (HIV) treatment because of the potential for drug-drug interactions (see http://aidsinfo.nih.gov/guidelines). Awareness of drug interactions is important when prescribing HIV medications. Some medications may be contraindicated if the patient has a history of pancreatitis or alcoholism, or should be used with caution and more frequent monitoring with co-occurring mental illness, hepatitis C, high cholesterol, or diabetes. Some HIV medications and HIV itself may cause metabolic changes, which can include diabetes, hyperlipidemia, and changes in body fat distribution, in addition to osteoporosis and lactic acidosis. Antiretroviral therapy (ART) can also exacerbate pre-existing diabetes.
- A person with a history of bipolar disorder should not be prescribed a regimen containing efavirenz, which may precipitate worsening of mental health conditions; a patient with a history of irritable bowel syndrome or hyperlipidemia should avoid lopinavir/ritonavir, which may exacerbate these conditions.

Qualifying Statements

Qualifying Statements

- The contents of this guideline are solely the responsibility of the Advisory Committee and do not necessarily represent the official views of the Health Resources & Services Administration.
- Clinical practice guidelines for people with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) who are unstably housed are fundamentally the same as those for the stably housed. However, primary care providers who routinely serve unstably housed patients recognize an increased need to consider the patient's living situation, co-occurring disorders, and motivation to remain in HIV care and adhere to treatment when developing a plan of care. The recommendations in this guide were developed to assist clinicians who provide HIV care for unstably housed adults and adolescents by providing both evidence-based recommendations and practical suggestions for managing this population. It is expected that these simple adaptations of established clinical guidelines will maximize opportunities for these individuals to receive the optimum standard of care and decrease their morbidity, mortality, and risk of transmission to others.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Audain G, Bookhardt-Murray LJ, Fogg CJ, Gregerson P, Haley CA, Luther P, Treherne L. Knopf-Amelung S, editor(s). Adapting your practice: treatment and recommendations for unstably housed patients with HIV/AIDS. 3rd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2013. 51 p. [79 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2003 (revised 2013)

Guideline Developer(s)

Health Care for the Homeless (HCH) Clinician's Network - Medical Specialty Society

National Health Care for the Homeless Council, Inc. - Nonprofit Organization

Source(s) of Funding

This publication was made possible by grant number U30CS09746 from the Health Resources & Services Administration, Bureau of Primary Health Care.

Guideline Committee

Advisory Committee on Adapting Clinical Guidelines for Unstably Housed Patients with HIV/AIDS

Composition of Group That Authored the Guideline

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The guideline committee members are also grateful to the following reviewer who commented on drafts prior to publication: Connie A. Haley, MD, MPH; Director of Community TB and HIV Initiatives, Vanderbilt University Institute for Global Health.

Financial Disclosures/Conflicts of Interest

The Heath Care for the Homeless (HCH) Clinicians' Network has a stated policy concerning conflict of interest. First, that all transactions will be conducted in a manner to avoid any conflict of interest. Secondly, should situations arise where a member is involved in activities, practices or other acts which conflict with the interests of the Network and its Membership, the member is required to disclose such conflicts of interest, and excuse him or herself from particular decisions where such conflicts of interest exist.

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Menchaca M, Martinez L, Stewart J, Treherne L, Vicic W, Audain G. Post P, editor(s). Adapting your practice. Treatment and recommendations for homeless patients with HIV/AIDS. 2nd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2008. 62 p.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the National Health Care for the Homeless Council, Inc. Web site .

Print copies: Available from the National Health Care for the Homeless Council, Inc., P.O. Box 60427, Nashville, TN 37206-0427; Phone: (615) 226-2292

Availability of Companion Documents

The National Health Care for the Homeless Council has developed a variety of resources to support health care providers in their service to persons experiencing homelessness. These resources are available for purchase as well as free download from the National Health Care for the Homeless Council Web site .

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on May 24, 2004. The information was verified by the guideline developer on June 24, 2004. This summary was updated on January 21, 2005, following the release of a public health advisory from the U.S. Food and Drug Administration regarding the use of nevirapine. This summary was updated by ECRI Institute on August 11, 2008 following the U.S. Food and Drug Administration advisory on Ziagen (abacavir sulfate). This summary was updated by ECRI Institute on December 24, 2008. The updated information was verified by the guideline developer on January 13, 2009. This summary was updated by ECRI Institute on April 13, 2012 following the U.S. Food and Drug Administration advisory on Statins and HIV or Hepatitis C drugs. This NGC summary was updated by ECRI Institute on April 22, 2014. This summary was updated by ECRI Institute on June 2, 2016 following the U.S. Food and Drug Administration advisory on Opioid pain medicines. This summary was updated by ECRI Institute on October 21, 2016 following the U.S. Food and Drug Administration advisory on opioid pain and cough medicines combined with benzodiazepines. This summary was updated by ECRI Institute on November 17, 2016 following the U.S. Food and Drug Administration advisory on Testosterone and Other Anabolic Androgenic Steroids (AAS).

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